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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,693	05/15/2001	Kazuhisa Fushihara	0020-4864P	8117

2292 7590 06/01/2005

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EXAMINER

GORDEN, RAEANN

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/854,693  
Filing Date: May 15, 2001  
Appellant(s): FUSHIHARA, KAZUHISA

**MAILED**

**Group 3700**

\_\_\_\_\_  
Joseph A. Kolasch  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 2, 2005.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

06-327791 Yoshimasa et al. (Japanese Publication) 11-1994

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimasa et al (JP 06-327791). Yoshimasa discloses a golf ball for water surface

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training comprising a core and a cover. The cover is made from an ionomer resin having a flexural modulus from 1500 to 3000 kg/cm<sup>2</sup> or 147 to 294 Mpa. The golf ball has a specific gravity from 0.5 to 1.0 (abstract). Applicant further claims the ratio (F/D) wherein F is the flexural modulus of the cover and D is the deformation of the golf ball. Applicant provides data for the Yoshimasa patent showing a F/D ratio from 36 to 98. Applicant's claimed F/D ratio is from 24 to 31 and the disclosed value is from 15 to 50 (spec 4). Therefore the F/D value is an obvious modification since applicant clearly discloses the range taught by Yoshimasa and does not teach away from the range. Furthermore, Yoshimasa and the present invention disclose identical materials for the core and cover layer. The cores are made from polybutadiene BR11, VCR412, Mipelon XM-220, Nipol 2007J, zinc oxide, hollow particles, methacrylic acid, and dicumyl peroxide. See table 1 of spec; pages 2-3 and tables 1-2 of the Yoshimasa translation. The covers have the same flexural modulus and are made from Himilan 1605, 1705, 1706 and 1855. See table 3 of spec; page 3 of the Yoshimasa translation. One of ordinary skill in the art would have modified the invention of Yoshimasa by lowering the F/D ratio to achieve the desired golf ball properties.

**(11) Response to Argument**

The present invention claims a floatable golf ball comprising a core and a cover. The prior art of record, Yoshimasa, also discloses a floatable golf ball comprising a core and cover. The compositions of the golf balls of the present invention and Yoshimasa are as follows:

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	Present Invention	Yoshimasa
Core Materials	BR11	BR11
	VCR412	VCR412
	Mipelon XM-220	Mipelon XM-220
	Nipol 2007J	Nipol 2007J
	Zinc Oxide	Zinc Oxide
	Hollow Particulate	Hollow Particulate
	Methacrylic acid	Methacrylic acid
	Dicumyl Peroxide	Dicumyl Peroxide
Cover Materials	Hi-milans 1855 1705 1706 1855	Hi-milans 1855 1705 1706 1855
Specific Gravity	0.5 to less than 1.0	0.5 to less than 1.0
Cover Flex Modulus (F)	80-300 MPa	147-294 MPa
Ball Deformation (D)	3.0-6.0 mm	3.0-4.1 mm *
F/D ratio (claimed)	24-31	
F/D ration (disclosed)	15-50	36-98*

\*Values calculated and presented by Appellant in response filed August 4, 2003.

As shown in the table, Yoshimasa discloses each and every limitation claimed by Appellant except the F/D ratio. Appellant calculated the F/D range for Yoshimasa as 36

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to 98. Appellant now claims a range from 24 to 31 and argues the range is not obvious over Yoshimasa. The question before the BPAI is whether or not the ratio (F/D) from 24 to 31 is an obvious modification of the range 36 to 98 (Yoshimasa). And whether or not the claimed range from 24 to 31 is critical to the invention. Appellant's claimed range from 24-31 is not shown to be critical to the invention. Attention is directed to pages 6 – 7 of the instant specification, which recites, "When the ratio (F/D) is larger than 50, only the cover is too hard and stress applied to the core is large, and the core is easily cut..... Therefore it is desired for the F/D ratio to be within the range of not more than 50, ....." Page 7 of the specification further recites, "When the ratio (F/D) is too small, the cover is soft, and the durability of the cover is degraded. Therefore it is desired for the ratio (F/D) to be within the range of not less than 15, ...". Appellant's specification makes clear the critical range necessary for the instant invention to perform properly is from 15 to 50.

Appellant further argues the criticality of the ranges by providing Figures A and B (page 17 of brief). However, the figures contradict the specification. The specification as originally filed discloses five examples (table 5) and five comparative examples (table 6). Appellant presents figure A in the instant brief and states examples 3 and 5 from the original specification are now shown as comparative examples. To support this argument Appellant narrows the table further by implying examples 3 and 5 have a durability that is much lower than the remaining examples (1, 2, and 4). Appellant's position is confusing, the original specification shows table 5 disclosing five superior golf balls that meet the requirements for the invention. Appellant now argues two of the five

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superior golf balls are inferior, having a lower durability. Relying on the durability of the examples is also confusing. Figure A shows the durability of examples 3 and 5 are lower than the remaining examples (1, 2, and 4). However, durability is not claimed and it is not clear why Appellant is presenting evidence that contradicts the original specification. Attention is directed to page 25 of the instant specification which recites, "In addition, the golf balls (examples 1-5) have a god shot feel and **excellent durability** and put as compared with the conventional golf balls of Comparative Examples 1 to 5."

In conclusion, it is submitted Appellant has not provided sufficient evidence to prove criticality of the ratio (F/D). Contrary to Appellant's arguments the specification clearly supports the position of the Examiner. As previously stated, Appellant's specification supports a critical range from 15 to 50. Table 5 of the instant specification discloses five examples with ratios (F/D) of 25, 31, 18, 24, and 50. Each of the examples is within the scope of the invention as disclosed in the specification. The specification clearly supports and shows examples of the ratio (F/D) from 15 to 50. For the above reasons, it is believed that the rejections should be sustained.

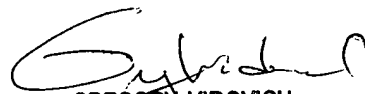
Respectfully submitted,



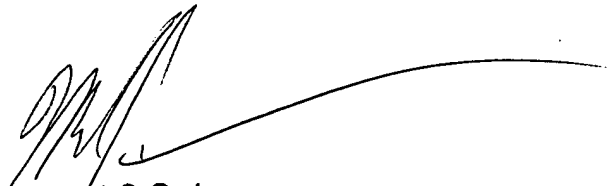
**RAEANN GORDEN  
PRIMARY EXAMINER**

rg  
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